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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,141	06/15/2001	Shuji Takana	1422-0480P	6016

2292 7590 02/10/2005

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EXAMINER
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DOUYON, LORNA M

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/868,141

Applicant(s)

TAKANA ET AL

Examiner

Lorna M. Douyon

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1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8, 16 and 18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 16 and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

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1. This action is responsive to the amendment filed on November 17, 2004.
2. The amendment to the abstract of the disclosure is withdrawn in view of applicants' amendment.
3. Claims 1-6, 8, 16 and 18 are pending.
4. The objection to claims 3 and 4 for minor informalities is withdrawn in view of applicants' amendment.
5. The rejection of claims 9-14 and 17 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Atkinson et al. (US Patent No. 4,900,466) is withdrawn in view of applicants' cancellation of these claims.
6. The rejection of claims 9-14 and 17 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Grecsek et al. (GB 2,097,419) is withdrawn in view of applicants' cancellation of these claims.
7. Claims 1-6, 8, 16 and 18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Emery et al. (US Patent No. 6,191,095) for the reasons set forth in the previous office action.

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8. The rejection of claims 9-14 and 17 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3, 5, 7, 9, 11, 15 and 17 of U.S.

Patent No. 6,376,453 is withdrawn in view of applicants' cancellation of these claims.

9. The rejection of claims 9-14 and 17 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2 and 16 of U.S. Patent No. 6,645,931 is withdrawn in view of applicants' cancellation of these claims.

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. Claims 1-6, 8, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson et al. (US Patent No. 4,900,466), hereinafter "Atkinson".

Atkinson teaches powders prepared by spray drying and suitable for use as detergent powders or components thereof and contain sodium carbonate and/or sodium carbonate/sodium sulphate double salt Burkeite modified with a low level of an organic polycarboxylate (see abstract). In Example 11, Atkinson teaches a spray-dried crystal-growth-modified Burkeite and comprising 65.5 wt% sodium sulphate (MW=142), 24.5 wt% sodium carbonate (MW=106), 2.0 wt% sodium polyacrylate (molecular weight 25,000), 4.5 wt% sodium silicate (MW=122) and 1.5 wt% total surfactant (see col. 13, line 58 to col. 14, line 20), wherein the molar ratio of sodium sulphate ( $65.5/142=0.46$ ) + sodium polyacrylate ( $2.0/25,000=0.00008$ ) + sodium silicate ( $4.5/122=0.037$ ) to sodium carbonate ( $24.5/106=0.23$ ) is about 7:3. This material was suitable for

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addition to a phosphate-built or aluminosilicate built detergent powder in Example 24 and 25 (see col. 14, lines 16-20). In each of Examples 24 and 25, 10.0 wt% of the carrier of Example 1 was incorporated into a spray-dried base powder comprising at least 10% by weight total surfactants wherein the final powder has a bulk density of 500g/l and 540 g/l, respectively (see col. 19, line 8 to col. 20, line 35). The spray dried carrier material, that is the crystal-growth-modified Burkeite, may form a major or minor part of the product (see col. 8, lines 10-13). Atkinson, however, fails to disclose the dissolution rate, microporous capacity, capability of releasing a bubble and a localized structure of the spray dried carrier material as those recited, the bulk density and particle size of the carrier material, the bulk density and particle size of the spray-dried base powder.

It would have been obvious to one of ordinary skill in the art at the time the invention was made reasonably expect the spray dried carrier material of Atkinson, as in Example 11, to have a bulk density, particle size, dissolution rate, microporous capacity, capability of releasing a bubble and a localized structure within those recited; and the base powders, as in Examples 24 and 25, to have a bulk density and particle size as those recited because similar compositions, similar ingredients and the same spray-drying process have been utilized. In addition, the final product, which was a blend of the spray-dried carrier material and spray-dried base powder, has a bulk density of about 500 g/l, hence each of the spray-dried carrier material and spray-dried powder, prior to blending should also have the same bulk density, particle size and properties as those recited.

*Response to Applicants' Arguments*

12. Applicants' arguments filed November 17, 2004 have been fully considered but they are not persuasive.

With respect to the rejection based upon Emery, Applicants argue that in the Emery disclosure (e.g. see Emery's Examples) composite detergent particles containing builder particles B1 are obtained by spray-drying two or more water-soluble substances (i.e., tripolyphosphate and silicate) and since the tripolyphosphate and the silicate in Emery are both "water-soluble salts" (i.e. a water-soluble inorganic salt and a low-molecular water-soluble organic acid salt), it follows that the disclosure of Emery is completely incapable of providing for the invention under consideration wherein "detergent additive particles (a) comprising 30 to 100% by weight of two or more kinds of water-soluble substances wherein a molar ratio of other one or more kinds of water-soluble substances to one kind of water-soluble substance is 7/3 or less, wherein the water-soluble substances comprise a water-soluble salt and a water-soluble polymer" as is recited in independent claim 1.

The Examiner respectfully disagrees with the above argument because a reference is not limited to working examples, see *In re Fracalossi* 215 USPQ 569 (CCPA 1982). In addition, nonpreferred embodiments can be indicative of obviousness, see *Merck & Co. v. Biocraft Laboratories Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1989); *In re Lamberti*, 192 USPQ 278 (CCPA 1976); *In re Kohler*, 177 USPQ 399. In col. 7, lines 23-37, Emery teaches organic builders that may additionally be present in the builder granules like polycarboxylate polymers such as polyacrylates and acrylic/maleic copolymers, preferably present in alkali metal salt in amounts of

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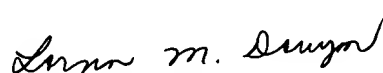
from 5 to 30 wt%. Hence, the spray-dried builder granules of Emery can include water-soluble polymers in their optimum proportions.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is (571) 272-1313.

The examiner can normally be reached on Mondays-Fridays from 8:00AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lorna M. Douyon  
Primary Examiner  
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